



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 13 2007

Ms. Mary Lou Capichioni
Director
Remediation Services
Corporate Environmental Services
The Sherwin-Williams Company
101 Prospect Avenue, N.W.
Cleveland, OH 44115-1075

Re: *Sherwin-Williams Gibbsboro Sites*
Response to EPA Letter Dated August 7, 2006
Sherwin-Williams Gibbsboro Sites, Route 561 Dump Site - Appendix A (November 30, 2006)

Dear Ms. Capichioni:

The U.S. Environmental Protection Agency (EPA) has completed its review of the November 30, 2006 *Response to EPA Letter Dated August 7, 2006 - Appendix A (Dump Site Groundwater Investigation)* submitted by the Sherwin-Williams Company (SWC) pursuant to Administrative Order Index No. II CERCLA-02-99-2035 for Remedial Investigation/Feasibility Study activities and offers the following comments.

1. SWC response letter, page 6 - SWC states that, based on the information presented in Appendix A, their previous conceptual model is valid and "that the well locations originally proposed are appropriate for the next phase of the groundwater investigation, and is requesting EPA concurrence with these locations." Based upon the following discussion, EPA does not concur with this statement and still contends that flow directions and velocities at the Route 561 Dump Site are not demonstrated.
2. Appendix A, Page A-3 - The text states that the groundwater flow is "reflective of the topography" and that "Surface water elevation data....were used as control elevation points to aid in the groundwater contour design in the vicinity of creeks and water bodies." Examination of Figures A-1, A-2, and A-3 prove that this is incorrect. Much of the Route 561 Dump Site area depicts groundwater contours which are topographically higher than surface elevations. This error has caused SWC to make incorrect assessments of groundwater flow directions and flow velocities. Instead of a tabular flow pattern that is directed to the southwest, the flow patterns are going to be quite variable and highly affected by surface topography. This error must be corrected before additional well locations can be selected.


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3. Appendix A, page A-4 - The horizontal hydraulic gradients in the text are incorrect. Instead, the gradients are going to be quite variable, depending upon location, and proximity to the surface water.
4. Appendix A, page A-5 - The lower bound on hydraulic conductivity stated in the text is likely incorrect. Examination of the curve match indicates that there was no sand pack porosity supplied for this analysis. EPA recommends a re-examination of this analysis and re-calculation of the averages.
5. Appendix A, page A-5 - The upper bound on hydraulic conductivity results from using the Hvorslev method of analyzing slug test results. This method has been mathematically proven to be valid only in zero-penetration conditions (i.e., the screen does not penetrate the thickness of the aquifer.) Please do not use this method of analysis for these data. Please recalculate the averages with an acceptable method.
6. Appendix A, page A-5 and A-6 - The numbers quoted for seepage velocity are incorrect. See comments above for explanation.
7. Table 4 - Please remove the Hvorslev results and recalculate the averages. (Also, fix Slug-in2 for DMMW0001.)
8. Figures 1A, 2A, and 3A - Please re-contour these figures and use surface water elevation data "as control elevation points to aid in the groundwater contour design in the vicinity of creeks and water bodies;" (i.e., check to make sure your groundwater elevation contours are not above the surface topography.)

If you have any questions on this matter, you may contact Mr. Ray Klimcsak, of my staff, at (212) 637-3916, or if you have any legal concerns, Mr. Carl Howard, Esq., at (212) 637-3216.

Sincerely yours,



Carole Petersen, Chief
New Jersey Remediation Branch

cc: Sally Jones, Weston
Hank Martin, ELM
John Doyon, NJDEP
Lynn Arabia, TetraTech